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Date of Deposit: February 22, 2005

Our Case No. 8285/432

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
)	
Bruce L. Peterson et al.)	
)	Examiner: C. Nguyen
Serial No. 10/024,734)	
)	Group Art Unit No. 3625
Filing Date: December 18, 2001)	
)	
For METHOD AND SYSTEM FOR)	
TRACKING COMPUTER SYSTEM)	
USAGE THROUGH A REMOTE)	
ACCESS SECURITY DEVICE)	

APPEAL BRIEF

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sirs:

This Appeal Brief is filed based on the final rejection of all pending claims mailed on July 21, 2004, and further to the Notice of Appeal filed November 22, 2004.

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I. Real Party in Interest

The real party in interest is SBC Properties, L.P., of Reno, Nevada.

II. Related Appeals and Interferences

There are no related appeals or interferences that would affect, be affected by, or have a bearing upon, the Board's decision in the present appeal in this application. An Appeal Brief was filed in the parent for this application, Application Serial No. 09/008,344, now U.S. 6,349,289, however prosecution was reopened and that appeal did not go forward.

III. Status of Claims

Claims 1-20 are pending in this application. All of the pending claims stand finally rejected. Claims 1, 7 and 9-20 are rejected under 35 U.S.C. § 103(a) over U.S. Pat. No. 6,016,343 in view of U.S. Pat. No. 5,901,228 and further in view of U.S. Pat. No. 5,646,989. Claims 2 and 5 are rejected under 35 U.S.C. § 103(a) over U.S. Pat. No. 6,016,343 in view of U.S. Pat. No. 5,901,228 and further in view of official notice. Claims 3 and 8 are rejected under 35 U.S.C. § 103(a) over U.S. Pat. No. 6,016,343 in view of U.S. Patent No. 5,742,905. Claims 4 and 6 are rejected under 35 U.S.C. § 103(a) over U.S. Pat. No. 6,016,343 in view of U.S. Pat. No. 5,901,228 and further in view of U.S. Pat. No. 5,742,905. All of the pending rejected claims, claims 1-20, are appealed.

IV. Status of Amendments

The last amendment filed in this case was submitted on January 30, 2004. All amendments have been entered.

V. Summary of Claimed Subject Matter

The claimed subject matter relates to a system and method for monitoring computer usage and generating billing information for each of a plurality of unrelated host computer networks subscribing to security services from a remotely located third party security server. Various unrelated host computer networks may authenticate users of their respective systems using a service provided by a third party and that third

party may then provide certain computer usage information and billing information services to the host computer networks (Paragraphs 0007 and 0019-0020).

One embodiment of the system includes a database 37 containing periodic user fees and service fees for each of the plurality of host computers and their respective authorized users (p. 4, paragraph 0011). The database communicates with a service bureau 22. A network access server (NAS) 30 at the service bureau 22 authenticates remote users of a host computer network 34 and gathers the start and end time stamps from the communication server 20 through which remote users communicate to access their respective unrelated host computer networks (p. 3, paragraph 0009; pp. 5-6, paragraphs 0014-0015). A user log is maintained that contains a computer usage time for each authorized user (p. 6, paragraph 0015).

At the end of a billing period, the user log is sent to a billing computer 42 along with the list of host computer networks and their associated users. The billing computer 42 then produces a billing report and compiles a computer usage report for each host computer network (pp. 6-7, paragraph 0017). This billing report and computer usage report may then be transmitted from the service bureau to the appropriate host computer network (pp. 7-8, paragraph 0019).

Appellant notes that pending claim 1 recites a user authentication system comprising three means-plus-function elements. The first element is means for determining if a remotely located computer is authorized to access one of the plurality of unrelated host computer networks. One example of corresponding support in the specification is found in FIG. 1 (reference 22) and on p. 9, paragraph 0009, as well as pp. 5-6, paragraphs 0014-0015 discussing the NAS server 30 and service bureau 22. The second element is means for establishing a connection between the remotely located user and one of the plurality of unrelated host computer networks. One example of corresponding support in the specification for this element is the NAS 30 and its control of the communication server 20 once the NAS has authenticated the user (FIG. 1; p. 3, paragraph 0009; pp. 5-6, paragraph 0015). The third means-plus-function element in claim 1 is means for generating and storing a user log. An example of support for this element is the NAS 30 (FIG. 1) and the functionality described in FIG. 2 at 56 and on pp. 5-6 in paragraphs 0015-0016.

VI. Grounds of Rejection to be Reviewed on Appeal

1) Claims 1, 7, and 9-20 stand rejected as obvious over U.S. Pat. No. 6,016,343 in view of U.S. Pat. No. 5,901,228 and further in view of U.S. Patent No. 5,646,989;

2) Claims 2 and 5, 9-10, stand rejected as obvious over U.S. Pat. No. 6,016,343 in view of U.S. Pat. No. 5,901,228 and further in view of Official Notice;

3) Claims 3 and 8 stand rejected as obvious over U.S. Pat. No. 6,016,343 in view of U.S. Pat. No. 5,742,905; and

4) Claims 4 and 6 stand rejected as obvious over U.S. Pat. No. 6,016,343 in view of U.S. Pat. No. 5,901,228 and further in view of U.S. Pat. No. 5,742,905.

VII. Argument

Appellant requests that the Board withdraw the rejections of all claims in the application because the references do not teach or suggest all the limitations of the claims. Arguments are presented below; each claim presented under a separate heading is intended to be considered separately.

1. Rejection of Claims 1, 7, and 9-20 as obvious over U.S. Pat. No. 6,016,343 ("Hogan et al.") in view of U.S. Pat. No. 5,901,228 ("Crawford") and further in view of U.S. Patent No. 5,646,989 ("Stambler")

Claim 1

Appellant appeals the final rejection of Claim 1 because the cited references do not teach or suggest, alone or in combination, several limitations of Claim 1.

The final office action dated July 21, 2004, did not provide a detailed discussion of apparatus claim 1. The Examiner provided comments on method claim 11 and stated his belief that claim 1 was obvious "using similar rationales and references for 35 USC 103 (a) rejection as above claim 11" (p. 7 of 7/21/2004 Final OA). Accordingly, the following discussion for apparatus claim 1 is based on the comments the Examiner recited in his rejection of method claim 11.

The first reference, Hogan et al., discloses generic telephone call services, such as billing and tracking calls in a telephone network. Pending claim 1 recites "means for determining if a remotely located computer user is authorized to access one of the

plurality of unrelated host computer networks” subscribing to the third party service. The Examiner cites to FIG. 1 and reference nos. AA110 and AA 112 in Hogan et al. as support for remote computer users and a plurality of unrelated host computer networks. The Examiner then cites to FIGS. 8-9 and reference numbers AF102, AG102 and AG112 as support for determining authorization. These sections, and Hogan et al. generally, fail to teach or suggest this feature of claim 1.

Appellant notes that what these portions of Hogan et al. actually disclose is a configuration of local and long distance telephone switches where a user AA106A is a long distance customer and may have its calls placed directly with the long distance provider AA112, or the user AA106A is a customer of a local carrier AA110 that is itself a customer of the long distance carrier (Col. 23, lines 2-29). No host computer network, or plurality of unrelated host computer networks, is taught or disclosed. Similarly, Hogan et al. lack teaching or suggestion of the claimed user authentication system with its means for determining if a remotely located computer is authorized to access one of the plurality of unrelated host computer networks. The reference to FIGS. 8-9 (See also FIG. 7 for context) in Hogan et al. relates to a calling card user calling in for operator assistance to verify calling card validity. No authorization to a destination host computer network is taught or suggested. Hogan discusses a telephone system where each carrier is authenticating its own users to make a call using long distance carrier resources, not a system configured to authenticate a remote computer user on behalf of the called party (i.e., host computer network).

This distinction is further emphasized by the billing application recited in claim 1 of the present application. The claimed billing application is responsive to receipt of a user log from the user authentication system to generate bills and computer usage summaries for each of the separate unrelated host computer networks that use the claimed system to authenticate their respective remote computer users. FIG. 9 and AG106 and AG108, cited by the Examiner as related to these elements, are inapposite. As set out in Col. 29, lines 30-67 of Hogan et al., the billing system AG108 handles billing for callers who utilize its telephone lines and not billing and computer usage time for the destination that receives a call.

The Examiner also included an unlabeled quotation from Hogan et al. in the July 21, 2004, Office Action italicizing the words 'billing' and 'call'. The recited text describes providing call cost estimates to a caller, debit card call handling, a telephone bill for the caller based on call length and rate, and etc. Appellant believes that this quotation comes from Col. 7, lines 25-67 of Hogan et al. This text is unrelated to a system for allowing a host computer network to use a third party security service to authenticate its users and then provide the host computer network (i.e. the destination of the call) with billing and computer usage information for its users as is claimed in claim 1. Pending claim 1 describes a system that includes a database of fees for each of the destination networks, a user authentication system that handles authentication of remote computer users to different destinations, and a billing application that is responsive to data from the authentication system to generate computer usage and billing information for each of the destinations (unrelated host computer networks) that use the services of the user authentication system. Appellant respectfully submits that at least these elements are missing from Hogan et al.

The second of the three references combined by the Examiner, Crawford, fails to make up for the deficiencies of Hogan et al. Crawford discloses "an on-line service that allows remote computer users to connect on-line to computer devices (e.g. 'virtual' disks) and access them to do such things as run computer software from them" (Crawford, Col. 1, lines 15-20). Examples of on-line services disclosed in Crawford include data storage (Col. 13, lines 31-51), and up-to-date software access (Col. 14, lines 1-21). The services are disclosed as all residing at a host computer which handles its own access security and bills its own users (Col. 50, line 31 – Col. 51, line 5). The Examiner cites to a passages in Crawford discussing how a specific on-line computer system 100 captures and provides its own billing information to, and authenticates its own, customers (Col. 57, lines 50-62; Col. 58, lines 28-41).

As noted above, pending claim 1 recites features of a database comprising a list of fees for each of a plurality of unrelated host computer networks, a user authentication system having, *inter alia*, means for determining if a remotely located computer user is authorized to access one of the plurality of unrelated host computer networks, and a billing application responsive to a user log generated by the user

authentication system to generate a bill and computer usage summary for each respective host computer network. Because Crawford discloses a single host computer network that authenticates and bills its own users, Crawford lacks any teaching or suggestion of a database with fee lists for each of a plurality of unrelated host computer networks. Crawford also lacks a user authentication system as claimed because the authentication in Crawford is internal to the host and thus there are no means for determining if a remote computer user is authorized to access one of a plurality of unrelated host computer networks. Furthermore, the billing disclosed in Crawford is generated by the computer network for its own users, not by a billing application that works with a user authentication system to generate billing and usage information for an appropriate host computer network it is providing authentication services for. The claimed billing application prepares and provides data (billing and computer usage) for the host computer network, not the users of the host computer network.

Finally, addressing the Examiner's use of Stambler as the third reference in the §103 rejection of claim 1 (p. 6 of 7/21/2004 Final OA), Appellant submits that Stambler does not make up for the deficiencies of Hogan et al. and Crawford. Appellant agrees with the Examiner that neither Hogan et al. nor Crawford teach or suggest remote user authentication to a host computer network via a third party authentication service (p. 6 of 7/21/2004 Final OA). Appellant does not agree, however, that Stambler makes up for this deficiency. The Examiner cites to claim 16 of Stambler as support for third party authentication. Rather than relating to third party authentication between users and their respective computer networks, Claim 16 of Stambler recites a method for issuing a credential to a first party from a second party. The credentials referred to in Stambler include motor vehicle registration, social security cards, passports and so on (Col. 8, lines 37-52). The portion of the specification in Stambler related to credential authentication (Cols. 8-13) recites system specific methods (i.e. those employed by the credentialing system itself) of authenticating a user or official of the credentialing agency, but do not relate to use of a third party authentication system that authenticates user's to unrelated systems.

As with Hogan et al. and Crawford, Stambler does not teach or suggest a database of fees for each of a plurality of unrelated host computer networks, a user

authentication system comprising the means recited in claim 1, or a billing application that generates a billing report and computer usage summary for each host computer network.

Appellant respectfully submits that the obviousness rejection of claim 1 should be withdrawn for at least the reasons set forth above. Claims 2-10 and 17-20 are dependent claims and their allowability directly follows from the allowability of independent claim 1.

Claim 7

Dependent claim 7 comprises all of the features of independent claim 1 and is therefore allowable for at least the same reasons as provided for claim 1. Additionally, claim 7 recites that the billing application comprises a stand-alone computer. The Examiner does not provide evidence of a stand-alone billing computer, or a stand alone billing computer of the type, and in the context of the invention, recited in claim 7. Instead, a general assertion is made that this feature is obvious. Appellant submits that this feature is not shown in the cited art and requests that this obviousness rejection be withdrawn.

Claim 9

Claim 9 includes all of the features of independent claim 1 and is therefore allowable for at least the same reasons as provided for claim 1. Additionally, unlike the cited references, claim 9 includes the feature of a long distance carrier invoice for calls from authorized users to their respective host computer networks. Because the cited references lack any teaching or suggestion of a third party server authenticating users to host networks and billing the host computer networks, the cited references necessarily lack long distance carrier invoices of calls from users to host computer networks in such a system. Furthermore, the long distance carrier invoice is for use in billing each host computer, not the party that initiated the call (i.e. not the user). This is contrary to the teachings of the cited references and the "official notice" of generic billing systems that send invoices to callers. Accordingly, Appellant requests that the obviousness rejection of claim 9 be withdrawn.

Claim 10

Claim 10 includes all of the features of independent claim 1 and dependent claim 9 and is therefore allowable for at least the same reasons as those claims. Claim 10 additionally recites a bill generated by the billing application comprising fixed charges for each authorized user. Unlike the cited art and "official notice", the fixed charges are generated in a bill to the various host computer networks, not the remote computer users. The Examiner's suggestion of a flat rate Internet connection is relevant to personal accounts, not to charges to the host computer network that users are trying to reach. Because none of the cited art teaches or suggests these features, Appellant requests that the obviousness rejection be withdrawn.

Claim 11

The Examiner has rejected claim 11 as obvious over the combination of Hogan et al., Crawford and Stambler. Claim 11 is a method claim reciting specific steps for authenticating computer users of various host computer networks to their respective computer networks via a third party server that authenticates the computer users, tracks computer usage and billing, and sends a computer usage and billing report to the host computer networks.

The method of amended claim 11 includes, *inter alia*, the acts of:

receiving at a communication server a request from a remotely located computer user to access one of the plurality of unrelated host computer networks;

automatically transmitting information regarding the request from the communication server to the network access server, the information comprising identification information for the remotely located computer user;

determining at the network access server if the user is authorized to access the one of the plurality of unrelated host computer networks;

establishing a connection between the remotely located computer user and the one of the plurality of unrelated host computer networks via the communication server if the remotely located user is an authorized remotely located user for the one of the plurality of unrelated host computer networks;

storing computer usage time for the authorized remotely located computer user in a user log at the network access server after the authorized remotely located computer user disconnects from the one of the plurality of unrelated host computer networks **whereby the user log contains a record of computer time usage for each authorized user;**

for each of the plurality of unrelated host computer networks, generating a billing and computer time usage summary, each billing and computer time usage summary listing charges and computer time usage for a respective one of the plurality of unrelated host computer networks; and

electronically transmitting each billing and computer usage summary to an appropriate one of the plurality of unrelated host computer networks.

(emphasis added)

Appellant submits that at least the highlighted portions of claim 11 are missing from the cited references.

Hogan et al., as described with reference to claim 1 above, discloses a telephone call processing system (Hogan et al., Col. 3, lines 19-37). The Examiner has cited to several reference numbers in FIGS. 1, 8 and 9 of Hogan et al. as allegedly disclosing all elements of claim 1 except “monitoring access to a host network” (p. 5, 7/21/2004 Final OA) and third party authentication (p. 6, 7/21/2004 Final OA). Appellant respectfully submits that the reference numbers and figures in Hogan et al. identified by the Examiner are inapposite. FIG. 1 of Hogan et al. shows a conventional telephone switching arrangement (Col. 9, lines 52-54). FIGS. 8 and 9 of Hogan et al. refer to operator assisted telephone calls (FIG. 8, Col. 27, line 46 – Col. 29, line 18) and a call processing system (FIG. 9, Col. 29, lines 19-67).

Rather than disclosing a method for authenticating computer users to their respective host computer networks, Hogan et al. is concerned with a telephone network validating its own users to complete their telephone calls and then billing those users for making the calls. Accordingly, Hogan et al. lacks the highlighted claim elements of claim 11, because no plurality of host computer networks is taught or disclosed and no authentication of users to their respective host computer networks is disclosed. Instead, Hogan et al. discloses telephone call processing concerned with whether the

telephone network on which a call is placed should allowed the call to be completed on the network. The validation, fraud detection and billing functions discussed in Hogan et al. relate not to authentication by a third party server on behalf of the host computer network a computer user is trying to reach, but to how the disclosed telephone network handles its own authentication and billing of its own users. The last highlighted element in claim 11, "electronically transmitting each billing and computer usage summary to an appropriate one of the plurality of unrelated host computer networks", further illustrates the completely different method taught by claim 11. Where Hogan et al. is concerned with a network handling its own billing and validation of its own users, claim 11 relates to a third party system that, as part of authenticating computer users for each of a plurality of unrelated host computer networks, monitors computer usage for the host computer networks and transmits to each host computer network a computer usage and billing summary.

Crawford fails to make up for the deficiencies in Hogan et al. The description of Crawford in the discussion of claim 1 above is incorporated herein. While Crawford does relate to authentication of a computer user to a computer network, it discusses how the computer network authenticates and bills its own users. Crawford lacks a plurality of unrelated host computer networks and any teaching or suggestion of authorizing computer users to their respective host computer networks. Crawford also lacks any steps associated with generating computer usage and billing reports for the unrelated host computer networks.

Similarly, Stambler fails to make up for the deficiencies of Hogan et al. and Crawford. The description of Stambler in the discussion of claim 1 above is incorporated herein. Stambler is alleged to disclose authentication of a user by a third party. As noted above in the discussion of claim 1, Stambler does not teach or suggest third party authentication of computer users. Stambler discusses an encryption scheme a bank can use to authenticate check writers and recipients (Col. 3, line 55 – Col. 4, line 43) or a that telephone switch can use to authenticate the caller and called party (Stambler, Col. 22, lines 8-59). Stambler does not teach or suggest an a method as recited in claim 11 where computer users for a plurality of unrelated host computer networks are authorized by a network access server that also stores each user's

computer usage time and generates billing and computer usage reports for each of the unrelated host computer networks.

Because of the lack of teaching or suggestion in any of the cited references of at least the features discussed, Appellant respectfully requests that the obviousness rejection be withdrawn. Claims 12-16 are dependent claims and their allowability directly follows from the allowability of independent claim 11.

Claim 12

In addition to possessing the features of independent claim 11, claim 12 recites the features of generating a list of fixed charges and help desk charges for each unrelated host computer network. The Examiner cites to the rationale he provided in the rejection of claim 1 and asserts that the features of claim 12 are also obvious. Appellant notes that neither Hogan et al. nor Crawford teach or suggest a third party authentication server that authenticates host computer network users to their respective networks or that have billing applications configured to bill the called network rather than the calling party. Accordingly, the step of generating specific charges for each host computer network is also not taught or suggested. Appellant requests that the obviousness rejection of claim 12 be withdrawn.

Claim 13

Appellant submits that the obviousness rejection of dependent claim 13 should be withdrawn for at least the same reasons as provided for independent claim 11. In addition to the features of claim 11, claim 13 recites receiving a long distance telephone company report containing charges associated with each of the respective unrelated host computer networks as part of the step of generating a billing and computer time usage summary for each of the unrelated host computer networks. Hogan et al. discloses a telephone system that includes the long distance switch and therefore does not receive a long distance telephone company report from a long distance company because it is the long distance telephone company. Accordingly, Appellant requests that the obviousness rejection of claim 13 be withdrawn.

Claim 14

Claim 14 is rejected under the same rationale as Claim 13. Appellant submits that the obviousness rejection of dependent claim 14 should be withdrawn for at least the same reasons as provided for independent claim 11. In addition to the features of claims 11 and 13, claim 14 recites listing charges from the long distance company report for each remotely located computer user of the particular unrelated host computer network in the billing and computer time usage summary for a particular unrelated host computer network. Hogan et al. teaches billing callers for their own calls, not compiling a list of long distance charges for providing to each of a plurality of unrelated host computer networks that remote computer users are calling into. Accordingly, Appellant requests that the obviousness rejection of claim 14 be withdrawn.

Claim 15

Claim 15 is rejected under the same rationale as Claims 13 and 14. Appellant submits that the obviousness rejection of dependent claim 15 should be withdrawn for at least the same reasons as provided for independent claim 11. In addition to the features of claims 11, 13 and 14, claim 15 recites calculating a percentage of computer use time attributable to each of the remotely located computer users for the particular host computer network and distributing the charges from the long distance company report to appropriate remotely located computer users in the billing summary for the particular host computer network based on the calculated percentage. Hogan et al. teaches billing callers for their own calls, not compiling a list of long distance charges for providing to each of a plurality that remote computer users are calling into. Furthermore, there is no teaching or suggestion in Hogan et al. of breaking down long distance fees attributed to individual users, in a report to the user's host computer network. Accordingly, Appellant requests that the obviousness rejection of claim 15 be withdrawn.

Claim 16

Claim 16 comprises all the features of independent claim 11 and is therefore allowable for at least the same reasons as provided for claim 11. Additionally, claim 16 recites the step of recording starting and ending time stamps for a remote access call to the one of the plurality of unrelated host computer networks in the user log (as part of the step of storing computer usage time for the authorized remotely located computer user). The cited references fail to teach or suggest this step because they fail to teach or suggest calls to various ones of the plurality of unrelated host computer networks or the third party authentication process. Accordingly, the references cannot teach or suggest recording start or stop times for these types of calls if these types of calls are not disclosed. Withdrawal of the obviousness rejection of claim 16 is requested.

Claim 17

In rejecting claim 17, the Examiner cited to FIG. 9 and reference AG 108 of Hogan et al. Appellant submits that the obviousness rejection of dependent claim 17 should be withdrawn for at least the same reasons as provided for independent claim 1. In addition to the features of claim 1, claim 17 recites that the billing application comprises logic for generating a bill for each unrelated host computer network identifying costs associated with individual remotely located computer users. This is in stark contrast to Hogan et al. where the callers into the telephone network disclosed in Hogan et al. are billed, not the receiving party and not in a form where a bill to a receiving party (here each unrelated computer network) includes charges for all remote computer users of a receiving party. Accordingly, Appellant requests that the obviousness rejection of claim 17 be withdrawn.

Claims 18-20

Claims 18-20 are rejected under the same rationale as Claim 17. Appellant submits that the obviousness rejection of dependent claims 18-20 should be withdrawn for at least the same reasons as provided for independent claim 1. In addition to the features of claim 1, claims 18-20 recites a billing application configured to generate a

computer usage report that identifies computer usage by each of the remotely located computer users of a particular unrelated host computer network broken down by a desired time period. As discussed in the specification of the present application, for example at page 8, paragraph 0020, the computer usage report is separate from the billing charges and is data useful to the host computer networks to determine resource allocation needs for periods of heavy usage. The Examiner only cites to a general box in FIG. 9 of Hogan et al. labeled "billing system" as support for billing application configured to generate a computer usage report for each host computer network broken down by desired usage periods for all authorized users of the respective host computer network. Given that Hogan et al. does not teach or suggest host computer networks using a third party system for computer access authentication, or billing of a call recipient with an aggregate of call costs, Hogan does not teach or suggest generating a computer usage report for the host computer network showing the host computer network computer usage by desired time period breakdowns. Accordingly, Appellant requests that the obviousness rejections of claims 18-20 be withdrawn.

2. Rejection of claims 2 and 5 as obvious over U.S. Pat. No. 6,016,343 (Hogan et al.) in view of U.S. Pat. No. 5,901,228 (Crawford) and further in view of Official Notice

Claim 2

Claim 2 includes all the features of independent claim 1 and is therefore allowable for at least the same reasons as provided for claim 1. In addition, claim 2 recites a help desk computer in communication with the billing application. Claim 2 also recites a help desk memory having a list of authorized users that accessed the help desk. None of the cited references teach or suggest the claimed help desk computer or memory with authorized users who have accessed the help desk, either alone or in the context of the overall claimed invention. The Examiner combines the three references used for claim 1 with "official notice" that "this is analogous to a telephone operator" when caller contact is recorded. Applicant submits that a regular telephone operator is not a computer system help desk and that none of the cited references teach or suggest the features of claim 2. Withdrawal of the obviousness rejection is requested.

Claim 5

Claim 5 includes all of the features of independent claim 1 and is therefore allowable for at least the same reasons as provided for claim 1. In addition, claim 5 recites that the billing application is configured to receive the list of authorized users who have accessed a help desk and that **each bill generated for each of the plurality of unrelated host computer networks further comprises a list of help desk charges**. The cited references, in addition to lacking features previously discussed, fail to teach or suggest a billing application that is configured to generate a bill for each of the plurality of unrelated host computer networks that includes a list of help desk charges. The Examiner gives official notice that help desk charges are like operator assistance charges, but this takes the language of claim 5 out of context by ignoring the feature of the billing application being configured to place help desk charges of users in a bill for host computer networks. Accordingly, Appellant submits that the cited art and official notice fail to teach or suggest the features of claim 5.

3. Rejection of claims 3 and 8 as obvious over U.S. Pat. No. 6,016,343 (Hogan et al.) in view of U.S. Pat. No. 5,742,905 (Pepe et al.)

Appellant submits that claims 3 and 8 are allowable for at least the same reasons as provided for independent claim 1. Additionally, claims 3 and 8 recite the feature of a frame relay connection between the user authentication system and billing application. In addition to the absence of a frame relay network connection, Hogan et al. lacks a user authentication system as claimed and a billing application as claimed. The Pepe et al. reference recites a general personal communications interworking system to access and control information from differing wireless and wireline networks (Pepe et al., abstract). The Examiner cites to one of a few brief mentions of general frame relay network access capabilities in Pepe et al. Other than referring to the ability to communicate with a frame relay network, there is no teaching or suggestion in Pepe et al. of connecting a billing application and a user authentication server as claimed, let alone combining a frame relay network to connect these components. Accordingly,

Appellant respectfully submits that the cited references do not teach or suggest the features of claims 3 or 8 alone or in combination. Withdrawal of the obviousness rejection of claims 3 and 8 is requested.

4. Rejection of claims 4 and 6 as obvious over U.S. Pat. No. 6,016,343 (Hogan et al.) in view of U.S. Pat. No. 5,901,228 (Crawford) and further in view of U.S. Pat. No. 5,742,905 (Pepe et al.)

In the Office Action dated July 21, 2004, the Examiner rejected claims 4 and 6 as obvious over the above-identified combination of references. The Examiner also mentioned that the “rationales and references for rejection of claim 1 is incorporated”. Appellant notes that Stambler was also combined in the rejection of claim 1, but that no relevance of Stambler to the added features of claims 4 and 6 is provided. Also, the relevance of Pepe et al. to the features of claim 4 is not provided by the Examiner. Appellant submits that dependent claims 4 and 6 include all of the features of independent claim 1 and are allowable for at least the same reasons as provided for independent claim 1.

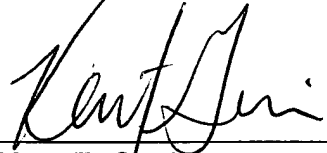
Claim 4

Appellant submits that claim 4 is allowable for at least the same reasons as provided for independent claim 1. In addition to the features of claim 1, claim 4 recites that the database containing fees for each unrelated host computer network further comprises a list of groups for each host computer network, wherein at least a portion of authorized users for each host computer network are associated with a group in the list of groups. The Examiner states that Hogan et al. “discloses this analogous element”. Appellant respectfully submits that this is inconsistent with Hogan et al. because Hogan et al. disclose billing callers that use the telephone system disclosed in Hogan, not maintaining a list of authorized users for host computer networks that utilize a third party authentication server to authorize communication of remote computer users to their respective host computer networks. Accordingly, because none of the cited references teach or suggest, alone or in combination, the features of claim 4, Appellant respectfully requests withdrawal of the obviousness rejection.

CONCLUSION

In view of the above remarks, Appellant submits that the claims are not rendered obvious by the references of record. Accordingly, Appellant requests withdrawal of the rejections of Claims 1-20 under 35 U.S.C. §103(a). Appellant submits that claims 1-20 are in condition for allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Kent E. Genin", is written over a horizontal line.

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VIII. Claims Appendix

1. A system for generating billing and computer usage time information for each of a plurality of unrelated host computer networks subscribing to security services from a remotely located security server, the system comprising:

a database stored on a computer readable medium, the database comprising a list of fees for each of the plurality of unrelated host computer networks;

a user authentication system comprising:

means for determining if a remotely located computer user is authorized to access one of the plurality of unrelated host computer networks;

means for establishing a connection between the remotely located computer user and one of the plurality of unrelated host computer networks if the remotely located user is an authorized remotely located user for the one of the plurality of unrelated computer networks; and

means for generating and storing a user log, the user log having a list of computer usage time for authorized users connected to the plurality of unrelated host computer networks via the user authentication system; and

a billing application in communication with the database and the user authentication system, the billing application responsive to receipt of the user log from the user authentication system to generate a bill and computer usage summary for each of the plurality of unrelated host computer networks based on the list of fees in the database.

2. The system of claim 1, further comprising a help desk computer in communication with the billing application, the help desk computer having a help desk memory containing a list of authorized users who have accessed the help desk over a predetermined time period.

3. The system of claim 1, wherein the user authentication system communicates with the billing application via a frame relay network.

4. The system of claim 1, wherein the database further comprises a list of groups for each host computer network, wherein at least a portion of authorized users for each host computer network are associated with a group in the list of groups.

5. The system of claim 2, wherein the billing application is configured to receive the list of authorized users who have accessed the help desk and each bill generated for each of the plurality of unrelated host computer networks further comprises a list of help desk charges.

6. The system of claim 1, wherein the billing application comprises logic residing on a server.

7. The system of claim 1, wherein the billing application comprises a stand-alone billing computer.

8. The system of claim 7, wherein the stand-alone billing computer is in communication with the user authentication system via a frame relay network.

9. The system of claim 1, wherein the billing application further comprises a long distance carrier invoice for calls made by authorized users to each of the plurality of unrelated host computer networks.

10. The system of claim 9, wherein the bill generated for each of the plurality of unrelated host computer networks comprises a fixed charge for each authorized user.

11. In a system for providing secure remote access between a plurality of unrelated host computer networks and a plurality of authorized users via a network

access server, a method of monitoring access to each of the unrelated host computer networks comprising the steps of:

- receiving at a communication server a request from a remotely located computer user to access one of the plurality of unrelated host computer networks;

- automatically transmitting information regarding the request from the communication server to the network access server, the information comprising identification information for the remotely located computer user;

- determining at the network access server if the user is authorized to access the one of the plurality of unrelated host computer networks;

- establishing a connection between the remotely located computer user and the one of the plurality of unrelated host computer networks via the communication server if the remotely located user is an authorized remotely located user for the one of the plurality of unrelated host computer networks;

- storing computer usage time for the authorized remotely located computer user in a user log at the network access server after the authorized remotely located computer user disconnects from the one of the plurality of unrelated host computer networks whereby the user log contains a record of computer time usage for each authorized user;

- for each of the plurality of unrelated host computer networks, generating a billing and computer time usage summary, each billing and computer time usage summary listing charges and computer time usage for a respective one of the plurality of unrelated host computer networks; and

- electronically transmitting each billing and computer usage summary to an appropriate one of the plurality of unrelated host computer networks.

12. The method of claim 11, wherein generating a billing and computer time usage summary further comprises generating a list of fixed charges and generating a list of help desk charges for each of the unrelated host computer networks.

13. The method of claim 11, wherein generating a billing and computer time usage summary further comprises receiving a long distance telephone company report

containing charges associated with each of the respective unrelated host computer networks.

14. The method of claim 13, further comprising listing, in the billing and computer time usage summary for a particular unrelated host computer network, charges from the long distance company report for each remotely located computer user of the particular unrelated host computer network.

15. The method of claim 14, wherein listing charges from the long distance company report comprises calculating a percentage of computer use time attributable to each of the remotely located computer users for the particular host computer network and distributing the charges from the long distance company report to appropriate remotely located computer users in the billing summary for the particular host computer network according to the calculated percentage of computer use time.

16. The method of claim 11, wherein storing computer usage time for the authorized remotely located computer user comprises recording starting and ending time stamps for a remote access call to the one of the plurality of unrelated host computer networks in the user log.

17. The system of claim 1, wherein the billing application comprises logic for generating a bill for each unrelated host computer network identifying costs associated with individual remotely located computer users.

18. The system of claim 1, wherein the billing application is configured to generate a computer usage report identifying computer usage by each of the remotely located computer users of a particular unrelated host computer network for a desired period of time.

19. The system of claim 18, wherein the desired period of time is by time of day.

20. The system of claim 18, wherein the desired period of time is by time of week.

IX. Evidence Appendix

None

X. Related Proceedings Appendix

None